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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,597	03/31/2004	Anthony L. Chun	042390.P18368	4366

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BLAKELY SOKOLOFF TAYLOR & ZAFMAN
12400 WILSHIRE BOULEVARD
SEVENTH FLOOR
LOS ANGELES, CA 90025-1030

EXAMINER	
BAKER, STEPHEN M	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/813,597	CHUN ET AL.	
	Examiner	Art Unit	
	Stephen M. Baker	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *110405,021306*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

In paragraph 0022, if a medium is to be claimed, the definition of a "machine-readable medium" should exclude intangible media, which it does not by specifying "any mechanism for storing or transmitting" rather that "any mechanism for storing" or by specifying "electrical, optical, acoustical or other form of propagated signals (e.g. carrier waves, infrared signals, digital signals, etc.), and others" if a medium is to be claimed.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the apparatus limitations are vague with regard to whether elements are reconfigurable to perform any of the alternative processes or whether the alternative processes are merely alternatives by which the claim can be met.

Regarding claims 10 and 19, the method limitations are vague with regard to whether elements are configurable to perform any of the alternative processes or

whether the alternative processes are merely alternatives by which the claim can be met.

Appropriate correction is required. Suggested changes are provided below:

1. A circuit, comprising:
a filter processing element reconfigurable to process a signal by use of a process selected from a group consisting of digital filtering, adaptive equalization, resampling, despreading, and fast-Fourier transforming;
at least one decoding processing element to decode and correct errors in said signal;
a general purpose processing element reconfigurable to process said signal by use of ~~an encoding~~ a code process selected from a reconfiguration group consisting of deinterleaving, descrambling, cyclic redundancy checking, convolutional encoding, Reed-Solomon encoding, turbo encoding, and Trellis encoding; and
one or more control units to direct the operations of the processing elements according to a first set of protocols, wherein the processing elements are coupled in a network.

2. The circuit of claim 1, wherein said ~~decode of said~~ at least one decoding processing element ~~includes~~ is reconfigurable to perform a decode process selected from a reconfiguration group consisting of a first forward error correction decoding, Reed-Solomon forward error correction decoding, turbo decoding, Trellis decoding, and Viterbi decoding.

4. The circuit of claim 1, wherein said one or more control units are implemented in said at least one decoding processing element or said general purpose processing element.

10. A method, comprising:
determining operations of one or more reconfigurable processing elements according to a first set of protocols;
receiving a signal from a network at a reconfigurable filter processing element;
processing said signal at said reconfigurable filter processing element by use of a process selected from a reconfiguration group consisting of digital filtering, adaptive equalization, resampling, despreading, and fast-Fourier transforming;
decoding said signal to decode and correct errors in said signal by at least one decoding processing element; and
processing said signal by a general purpose processing element by use of ~~an encoding~~ a code processing selected from a reconfiguration group consisting

of deinterleaving, descrambling, cyclic redundancy checking, convolutional encoding, Reed-Solomon encoding, turbo encoding, and Trellis encoding.

11. The method of claim 10, wherein ~~said decode of~~ said at least one decoding processing element ~~includes~~ is reconfigurable to perform a decode process selected from a reconfiguration group consisting of a first forward error correction decoding, Reed-Solomon forward error correction decoding, turbo decoding, Trellis decoding, and Viterbi decoding.

13. The method of claim 10, wherein said one or more control units are implemented in said at least one decoding processing element or said general purpose processing element.

19. A machine-readable medium that provides instructions, which when executed by a processing element, cause the processing element to perform operations comprising micro-coded accelerator based operations of:

determining operations of one or more processing elements according to a first set of protocols;

receiving a signal from a network at a reconfigurable filter processing element;

processing said signal at said reconfigurable filter processing element by use of a process selected from a reconfiguration group consisting of digital filtering, adaptive equalization, resampling, despreading, and fast-Fourier transforming;

decoding said signal to decode and correct errors in said signal by at least one decoding processing element; and

processing said signal at a general purpose processing element by use of ~~an encoding~~ a code processing selected from a reconfiguration group consisting of deinterleaving, descrambling, cyclic redundancy checking, convolutional encoding, Reed-Solomon encoding, turbo encoding, and Trellis encoding.

20. The machine-readable medium of claim 19, wherein ~~said decode of~~ said at least one decoding processing element ~~includes~~ is reconfigurable to perform a decode process selected from a reconfiguration group consisting of a first forward error correction decoding, Reed-Solomon forward error correction decoding, turbo decoding, Trellis decoding, and Viterbi decoding.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 19-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The specification indicates that applicant's intended scope of "machine-readable medium" includes intangible media. Any claim to a medium can only apply to a tangible medium.

Allowable Subject Matter

6. Claims 1-18 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Baker whose telephone number is (571) 272-3814. The examiner can normally be reached on Monday-Friday (11:00 AM - 7:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Stephen M. Baker
Primary Examiner
Art Unit 2133

smb